

REMARKS/ARGUMENT

Claims 3-7, 10-12, 14 and 16-20 stand objected to as being dependent upon a base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. By this amendment, Claim 3 has been rewritten to include the limitations of base Claim 1 and Claim 16 has been amended to include the limitations of base claim 15. Accordingly, Claims 4-7, 10-12 and 14 (which depend directly or indirectly on Claim 1) and Claims 17-20 (which depend directly or indirectly on Claim 16) stand allowable.

Claims 1, 2, 8, 13, 15 and 23 stand rejected under 35 U.S.C. 102(e) as being anticipated by Marcoccia et al. (USP 6,169,761). Applicants respectfully traverse this rejection, as set forth below.

In order that the rejection of any of Claims 1, 2, 8, 13, 15 and 23 be sustainable, it is fundamental that "each and every element as set forth in the claim be found, either expressly or inherently described, in a single prior art reference." Verdegall Bros. v. Union Oil Co. of California, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). See also, Richardson v. Suzuki Motor Co., 9 USPQ2d 1913, 1920 (Fed. Cir. 1989), where the court states, "The identical invention must be shown in as complete detail as is contained in the ... claim".

Furthermore, "all words in a claim must be considered in judging the patentability of that claim against the prior art." In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

Independent Claim 1, as amended, requires and positively recites, a method of controlling frequency hopping wireless communication between first and second frequency hopping wireless communication devices, comprising: "the first device obtaining quality measurements respectively associated **with frequencies that have been**

previously used by the second device to transmit information to the first device via a wireless communication link", "the first device **selecting, based on the quality measurements**, one of the frequencies for transmission of a selected upcoming communication from the first device to the second device" and "the first device transmitting to the second device via the wireless communication link information indicative of the frequency that has been selected for transmission of the selected communication".

Independent Claim 15, as amended, requires and positively recites, a frequency hopping wireless communication apparatus, comprising: "a frequency selector having an input for receiving **quality measurements associated with frequencies that have been previously used to receive**, via a wireless communication link, information transmitted by a further frequency hopping wireless communication apparatus, said **frequency selector operable for selecting, based on said quality measurements**, one of said frequencies for transmission of a selected upcoming communication to the further apparatus" and "a wireless communication interface coupled to said frequency selector for transmitting to the further apparatus via the wireless communication link information indicative of the frequency that has been selected for transmission of the selected communication".

Independent Claim 23, as amended, requires and positively recites, a frequency hopping wireless communication apparatus, comprising: "a wireless communication interface for receiving via a wireless communication link from a further frequency hopping wireless communication apparatus information indicative of a frequency that has been selected for transmission of a selected communication from the further apparatus to said apparatus, **said frequency having been selected by the further apparatus from a plurality of frequencies based on quality measurements respectively associated with said frequencies, said frequencies having been previously used by said apparatus to transmit information to the further apparatus** via the wireless communication link" and "an indicator coupled to said wireless communication interface and responsive to said

information for indicating to the wireless communication interface that the selected frequency is to be used for receiving the selected communication via the wireless communication link”.

In contrast the invention of Claims 1, 15 and 23, where one frequency hopping wireless communication device selects a frequency for transmission of a selected upcoming communication to another frequency hopping wireless communication device based on quality measurements respectively associated **with frequencies that have been previously used by the second device to transmit information to the first device via a wireless communication link**, the Marcoccia reference teaches a communication device that selects a frequency for an upcoming communication by comparing the RSSI of the noise floor at each frequency hop against a clear channel assessment (CCA) threshold based upon a previous RSSI measurement indicative of the received signal level (RSL) when the same channel was successfully used (col. 7, lines 57-61).

Accordingly, Marcoccia fails to teach or suggest, “the first device obtaining quality measurements respectively associated **with frequencies that have been previously used by the second device to transmit information to the first device via a wireless communication link**”, “the first device selecting, based on the quality measurements, one of the frequencies for transmission of a selected upcoming communication from the first device to the second device”, as required by Claim 1, or “a frequency selector having an input for receiving **quality measurements associated with frequencies that have been previously used to receive**, via a wireless communication link, information transmitted by a further frequency hopping wireless communication apparatus, said **frequency selector operable for selecting, based on said quality measurements**, one of said frequencies for transmission of a selected upcoming communication to the further apparatus”, as required by Claim 15, or “a wireless communication interface for receiving via a wireless communication link from a further frequency hopping wireless communication apparatus information indicative of a frequency that has been selected for transmission of a selected

communication from the further apparatus to said apparatus, **said frequency having been selected by the further apparatus from a plurality of frequencies based on quality measurements respectively associated with said frequencies, said frequencies having been previously used by said apparatus to transmit information to the further apparatus** via the wireless communication link”, as required by Claim 23. Therefore, the 35 U.S.C. 102(e) rejection of Claims 1, 15 and 23 is overcome.

Claims 2, 8 and 13 stand allowable as depending from allowable claims and including further limitations not taught or suggested by the references of record.

Claim 2 further defines the method of Claim 1, by including the first device **obtaining a further plurality of quality measurements respectively associated with a further plurality of frequencies that have been used previously by the second device to transmit information to the first device via the wireless communication link**, the first device selecting, based on the further plurality of quality measurements, one of said further plurality of frequencies for transmission of a further upcoming communication from the first device to the second device, and the first device using the frequency selected in the first-mentioned selecting step to transmit the selected communication to the second device via the wireless communication link and including within the selected communication information indicative of the frequency that has been selected for transmission of the further communication. There is no teaching or suggestion in Marcoccia that, in addition to obtaining a plurality of quality measurements associated with frequencies that have been previously used by the second device to transmit information to the first device, it teaches **obtaining a further plurality of quality measurements respectively associated with a further plurality of frequencies that have been used previously by the second device to transmit information to the first device via the wireless communication link**, as further required by Claim 2. The 35 U.S.C. 102(e) rejection of Claim 2 is overcome.

Claim 8 further defines the method of Claim 1, wherein the selected frequency is a frequency other than a normal frequency normally specified for the selected communication by a frequency hopping pattern associated with the first device. Claim 8 stands allowable for the same reasons given in support in allowance of Claim 1. Moreover, the Marcoccia reference fails to teach or suggest this additional limitation in combination with the other requirements of Claim 1.

Claim 13 further defines the method of Claim 1, including the first device transmitting the selected communication on the selected frequency, and the second device receiving the selected communication on the selected frequency. Claim 8 stands allowable for the same reasons given in support in allowance of Claim 1. Moreover, the Marcoccia reference fails to teach or suggest this additional limitation in combination with the other requirements of Claim 1.

Claims 9, 20-21 and 25-26 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Marcoccia et al. (US patent number 6,169,761). Applicants respectfully traverse this rejection as follows:

In proceedings before the Patent and Trademark Office, “the Examiner bears the burden of establishing a prima facie case of obviousness based upon the prior art”. In re Fritch, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992) (citing In re Piasecki, 745 F.2d 1468, 1471-72, 223 USPQ 785, 787-88 (Fed. Cir. 1984).

The basis for the Examiners rejection of Claims 9, 21 and 25 is that Bluetooth is notoriously known in the communication area and the Examiner took official notice that it would have been obvious to one of ordinary skill in the art to apply the system of Marcoccia Bluetooth. Applicants respectfully reply that the Examiner’s reliance on Bluetooth does nothing to address the deficiencies of the Marcoccia as identified in Applicants’ arguments in support of the allowance of Claims 1, 15 and 23.

The basis for the Examiners rejection of Claims 22 and 26 is that cordless devices are is notoriously known in the communication area and the Examiner took official notice that it would have been obvious to one of ordinary skill in the art to apply the system of Marcoccia to cordless phones. Applicants respectfully reply that the Examiner's reliance on Bluetooth does nothing to address the deficiencies of the Marcoccia as identified in Applicants' arguments in support of the allowance of Claims 15 and 23.

Accordingly, the 35 U.S.C. 103(a) rejection of Claims 9, 20-21 and 25-26 are overcome.

Although couched in terms of combining teachings found in the prior art, the same inquiry must be carried out in the context of a purported obvious "modification" of the prior art. **The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification.** In re Gordon, 733 F.2d at 902, 221 USPQ at 1127. Moreover, **it is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the prior art so that the claimed invention is rendered obvious.** In re Gorman, 933 F.2d 982, 987, 18 USPQ2d 1885, 1888 (Fed.Cir.1991). See also Interconnect Planning Corp. v. Feil, 774 F.2d 1132, 1138, 227 USPQ 543, 547 (Fed.Cir.1985).

Accordingly, Claims 1-26 stand allowable. For the record, Applicants note that the amendments they made to Claims 1, 15 and 23 were solely for the purpose of clarifying the invention and NOT for the purpose of overcoming prior art. Applicants respectfully request allowance of the application as the earliest possible date.

Respectfully submitted,



Texas Instruments Incorporated
P. O. Box 655474, M/S 3999
Dallas, Texas 75265
Phone: 972/917-5299
Fax: 972/917-4418

Ronald O. Neerings
Reg. No. 34,227
Attorney for Applicants